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09/987,098	11/13/2001	Suk Sang Oh	K-0342	6523

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EXAMINER
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BARQADLE, YASIN M

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/987,098

Applicant(s)

OH, SUK SANG

Examiner

Yasin M. Barqadle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### Response to Amendment

1. The amendment filed on June 27, 2005 has been fully considered but are not deemed to be persuasive.

2. Claims 1-27 are presented for examination.

### Response to Arguments

3. In response to Applicant's arguments in page 10 last paragraph and page 11 second paragraph that "Dommetry does not teach or suggest the sending of stored packets from a first foreign agent to a second foreign agent, Rather, Dommetry discusses retransmission of the data packet based on updated information." Examiner notes that the updated information is stored in a first foreign agent where buffering is performed and retransmission of the data packet to a second foreign agent is done (col. 5, lines 57 to col. 6, line 24; col. 7, 28-56. See also Col. 7, lines 8-27 "During this communication, the Receiving Mobile Node disconnects from a first router and reconnects to a different router. For example, the Receiving Mobile Node moves from the HA's router to a FA router. By way of another example, the Receiving Mobile Node moves from a first FA to a second FA." Examiner also notes that (buffering and

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triggering are performed by any foreign agent or the mobile node itself. It may be distributed over several nodes or routes Fig.

1 and figs. 2A-B and col. 5, lines 29 to col. 6, line 25).

In response to Applicant's arguments in page 12 second paragraph regarding sending a notification message to the first foreign agent when a mobile node moves from the first foreign network to a second foreign network (first foreign agent receives a binding update message from a new foreign agent. Mobile node informs the new foreign agent about the location of the old foreign agent so that a binding update message is sent to it (col. 7, 9-49 and col. 11, lines 26-44).

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual

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Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1, 3, 5-7, 8-10, 12, 14-15, 17, 19-24 and 226-26 rejected under 35 U.S.C. 102(e) as being anticipated by Dommetty et al U.S. Pat. No. (6,510,144).

As per claim 1, Dommetty et al teach a mobile Internet Protocol (IP) system (fig. 1, system 2 and abstract), comprising:

a mobile node (mobile node 6, fig. 1) initially linked to a first foreign network (mobile node is linked to WAN 4, through elements 12 and 14. See fig. 1, FA 10 and R2, col. 1, lines 3-65 and col. 5, lines 57 to col. 6, line 48);

a home agent receiving a set of data packets, which are supposed to be transmitted to said mobile node, said home agent being included in a home network of said mobile node (HA 8, receives data packets from FA 10 and Node 18. See fig. 1, MN (2) and col. 5, lines 57 to col. 6, line 48); and

a first foreign agent initially receiving said packets from

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said home agent and storing them in a buffer (see the steps in figs. 2A-B and col. 5, lines 57 to col. 6, line 56) and additionally sending said stored packets to a second foreign agent included in a second foreign network if said mobile node is moved to said second foreign network, said first foreign agent being included in said first foreign network (col. 3, lines 4-49 col. 5, lines 57 to col. 6, line 56; col. 7, 9-49 and col. 11, lines 26-44).

As per claim 3, Dommetry et al teach the mobile IP system of claim 1, wherein said first foreign agent additionally sends said stored packets to said mobile node if said mobile node continues to be linked to said first foreign network (fig. 1, col. 5, lines 57 to col. 6, line 42 and col. 7, lines 4-49).

As per claim 5, Dommetry et al teach the mobile IP system of claim 1, wherein said buffer is coupled to said first foreign agent (col. 5, lines 29-66).

As per claim 6, Dommetry et al teach the mobile IP system of claim 1, wherein said mobile node sends a notification message to said first foreign agent if said mobile node is moved to said second foreign network (col. 7, 9-40 and col. 11, lines 26-34).

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As per claim 7, Dommetry et al teach the mobile IP system of claim 6, wherein said first foreign agent determines whether said mobile node is moved to said second foreign network by checking whether said notification message is received from said mobile node (col. 2, lines 1-48; col. 7, 9-40 and col. 11, lines 26-34).

As per claim 8, this is a method claim with similar limitations as claims 1 and 6-7. Therefore, it is rejected with the same rationale.

As per claim 9, Dommetry et al teach the method of claim 8, wherein said first buffer is coupled to said first foreign agent (col. 5, lines 29-66).

As per claim 10, Dommetry et al teach the method of claim 8, wherein said second buffer is coupled to said second foreign agent (Fig. 1 and col. 5, lines 29 to col. 6, line 25).

As per claim 12, Dommetry et al teach the method of claim 8 further comprising a step of transmitting said packets stored in said first buffer to said mobile node if said mobile node continues to be linked to said first foreign network (fig. 1,

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col. 5, lines 57 to col. 6, line 42 and col. 7, lines 4-49).

As per claim 14, Dommetty et al teach the method of claim 8, wherein said notification message is generated from said mobile node (col. 7, 9-49 and col. 11, lines 26-44).

As per claim 15, Dommetty et al teach the data routing method of a first foreign agent in a mobile Internet Protocol (IP) network, the method comprising the steps of:

(a) receiving a set of data packets and storing them in a buffer (HA 8, receives data packets from FA 10 and Node 18. See fig. 1, MN (2) and col. 5, lines 57 to col. 6, line 48);

(b) determining a mobile node to which said packets are supposed to be transmitted (col. 2, lines 1-48 and col. 5, lines 57 to col. 6, line 48);

(c) determining if said determined mobile node is moved to a second foreign network having a second foreign agent (col. 8, lines 3-58 and col. 9, lines 6-46); and

(d) transmitting said packets stored in said buffer to said second foreign agent if said mobile node is moved to said second foreign network (col. 7, lines col. 3, lines 4-49 and col. 9, lines 6-44).



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As per claim 17, Dommetry et al teach the method of claim 15 further comprising a step of transmitting said packets stored in said buffer to said mobile node if said mobile node continues to be linked to said first foreign network (fig. 1, col. 5, lines 57 to col. 6, line 42 and col. 7, lines 4-49).

As per claim 19, Dommetry et al teach the method of claim 15, wherein said buffer is coupled to said first foreign agent (col. 5, lines 29-66).

As per claim 20, Dommetry et al teach the method of claim 15, wherein said mobile node sends a notification message to said first foreign agent if said mobile node is moved to said second foreign network (col. 7, 9-40 and col. 11, lines 26-34).

As per claim 21, Dommetry et al teach the method of claim 20, wherein said determination step (c) is performed by checking whether said notification message is received from said mobile node (col. 2, lines 1-48; col. 7, 9-40 and col. 11, lines 26-44).

As per claim 22, Dommetry et al teach the method of claim 20, wherein an IP address of said second foreign agent is indicated

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in said notification message (col. 2, lines 1-48 and col. 11, lines 26-44).

As per claim 23, Dommety et al teach a mobile Internet Protocol (IP) method (fig. 1, system 2 and abstract), comprising:

receiving packets at a first foreign agent associated with a first foreign network storing said packets in a first buffer; (HA 8, receives data packets from FA 10 and Node 18. See fig. 1, MN (2) and col. 5, lines 57 to col. 6, line 48; col. 7, lines 4-24. See also col. 9, lines 11-17);

sending a notification message to the first foreign agent when a mobile node moves from the first foreign network to a second foreign network (first foreign agent receives a binding update message from a new foreign agent (See the steps in figs. 2A-B and col. 5, lines 57 to col. 6, line 56; col. 7, 9-49 and col. 11, lines 26-44); and

sending said packets in said first buffer to a second foreign agent associated with second foreign network, (col. 7, lines col. 3, lines 4-49).

As per claim 24, Dommety et al teach the method of claim 23, further comprising storing said packets in a second buffer associated with said second foreign agent (buffering and

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triggering are performed by any foreign agent or the mobile node itself. It may be distributed over several nodes or routes Fig. 1 and figs. 2A-B and col. 5, lines 29 to col. 6, line 25).

As per claim 26, Dommetty et al teach the method of claim 23, wherein said notification message is sent from said mobile node (col. 7, 9-49 and col. 11, lines 26-44).

As per claim 27, Dommetty et al teach the method of claim 23, further comprising:

sending said packets to a home agent (HA 8, receives data packets from FA 10 and Node 18. See fig. 1, MN (2) and col. 5, lines 57 to col. 6, line 48); and

sending said packets from said home agent to said first foreign agent (fig. 1 and figs 2A-B col. 3, lines 4-49 col. 5, lines 57 to col. 6, line 56; col. 7, 9-49 and col. 11, lines 26-44).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2,4,11,13,16 18 and 25 are rejected under 35 U.S.C.

103(a) as being unpatentable over Dommetty et al, U.S. Pat. No. 6,510,144 in view of Miller et al U.S. Pat. No. (6247058)

As per claims 2,4,11,13,16,18 and 25, Although Dommetty et al shows substantial features of the claimed invention, including overwriting old update information with newly received update information, he does not explicitly show deleting stored packets after sending the stored packets

Nonetheless, this feature is well known in the art and would have been an obvious modification of the system disclosed by Dommetty et al, as evidenced by Miller et al USPN. (6247058).

In analogous art, Miller et al whose invention is about a network device receiving packets from a first network segment, time stamps the packets as they arrive, and transmits the packets to a second network segment. Packets are stored in a buffer memory where they are discarded after certain period of time to make a room for an arriving packet (abstract and col. 8, lines 22-35. See also col. 12, lines 29-37). Giving the teaching

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of Miller et al, a person of ordinary skill in the art would have readily recognized the desirability and the advantage of modifying Dommety et al by employing the system of Miller et al in order conserve network bandwidth and to enhance the efficient use of buffer memory (abstract and col. 12, lines 29-49).

### Conclusion

1. **ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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The prior made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yasin Barqadle whose telephone number is 571-272-3947. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 571-272-3949. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or public PAIR system. Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have

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questions on access to the Private PAIR system, contact the  
Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YB

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**KRISNA LIM**  
**PRIMARY EXAMINER**